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Editorial

Adeno-associated virus vectorology and gene therapy applications

The adeno-associated virus (AAV) vector system is a good approach to study gene function in vivo. Over the past decade, the vector has proven versatile in studying a variety of target genes, target organ systems, and disease states in a reproducible manner. There is no known pathology associated with AAV, and unless one emerges, the increased use of these vectors is expected because the transgene expression is long-term and apparently safe. This issue includes up-to-date information on the production of vectors based on AAV-2 and other serotypes and also non-AAV parvoviral vectors. With different infection patterns in different target tissues, it appears that these vectors can be used as "horses for courses." Tricks and tips for injecting AAV vectors into the brain and spinal cord, including the neonatal brain, are discussed extensively, as are results in the brain with a variety of promoters including regulatable systems. Gene transfer strategies for the brain, spinal cord, eye, and heart are detailed with an emphasis on gene therapy for neurodegenerative diseases and stroke. Methods are also included for unbiased quantification of cell populations, either those expressing a reporter gene or those for an endogenous marker that is affected by gene transfer. In the era following the Human Genome Project, the power of the AAV vector system for functional genomics and target validation is "infectious," and it is hoped that the articles in this issue will aid scientists who wish to adopt these methods for their studies.

Ronald L. Klein
Guest Editor

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L Number	Hits	Search Text	DB	Time stamp
1	1	6346415.pn.	USPAT	2003/05/16 09:07
2	461	aav with vector	USPAT	2003/05/16 10:05
3	58350	promoter or promoters	USPAT	2003/05/16 10:05
4	2600763	small or size or minimal or minimize or limit$3	USPAT	2003/05/16 10:07
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8	1355158	element or elements	USPAT	2003/05/16 10:32
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-	31	FORMAT ADJ SAVE	USPAT	2000/07/27 13:15
-	1159	aav or adenoassociat$ or adeno adj associat$	USPAT	2001/06/06 14:25
-	1188	aav? or (aav or adenoassociat$ or adeno adj associat$)	USPAT	2001/06/06 14:25
-	726	itr or itrs or inverted adj terminal	USPAT	2000/09/23 19:01
-	346853	express$	USPAT	2000/09/23 18:21
-	74	(itr or itrs or inverted adj terminal) with express$	USPAT	2000/09/23 18:21
-	56	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2002/08/30 13:30
-	303	itr or itrs or inverted adj terminal	EPO; JPO; DERWENT	2000/09/23 19:02
-	341	aav or adenoassociat$ or adeno adj associat$ or aav?	EPO; JPO; DERWENT	2000/09/23 19:02
-	58	(itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?)	EPO; JPO; DERWENT	2001/06/05 14:37
-	36	express$ with (itr or itrs or inverted adj terminal)	EPO; JPO; DERWENT	2001/06/05 14:37
-	18	(express$ with (itr or itrs or inverted adj terminal)) and ((itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?))	EPO; JPO; DERWENT	2001/06/05 14:37
-	83	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2001/06/05 14:38
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-	21	(express$ with (itr or itrs or inverted adj terminal)) and ((itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?))	EPO; JPO; DERWENT	2001/06/06 14:07
-	1561	aav? or (aav or adenoassociat$ or adeno adj associat$)	USPAT	2001/06/06 14:25
-	1366	amyloid	USPAT	2001/06/06 14:26
-	111	(aav? or (aav or adenoassociat$ or adeno adj associat$)) and amyloid	USPAT	2001/06/06 14:26
-	1	(aav? or (aav or adenoassociat$ or adeno adj associat$)) same amyloid	USPAT	2001/06/06 14:26
-	12	amyloid with promoter$1 and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2001/06/06 14:27

-	130	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2002/08/30 14:29
-	59	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	US-PGPUB	2002/08/30 14:29

L Number	Hits	Search Text	DB	Time stamp
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